

UNIT CARGO LOADING AND DOCUMENTATION 612-150

References

- FM 3-35.4, Deployment Fort-to-Port (Appendix I)
- FM 4-01.011, *Unit Movement Operations* (Appendix D)
- FM 55-30, Army Motor Transport Units and Operations (Chapter 10)
- FORSCOM/ARNG Reg 55-1, Unit Movement Planning (Chapter 5)
- TB 55-46-1, Standard Characteristics for Transportability of Military Vehicles and Outsized/Overweight Equipment
- MTMCTFA PAM 55-20. Tiedown Handbook for Truck

Scope of Lesson

- Load Plan Cycle
 - Planning the Load
 - Testing the Load
 - Inspecting the Lo
 - Documenting the Load

Planning the Load

Planning the Load

- Planning for packing & loading unit equipment is an important deployment preparation activity
 - Involves identifying actual space, weight, packaging material & external transport requirements
 - Proper planning saves valuable time when ordered to deploy

Cube

- To determine how much space is needed, planners must first determine how much cargo needs to be moved
- The primary factor is cubic feet of space required for cargo shipments



Cube (Cont)

- Determine Volume in cubic feet
 - Step 1: Take measurements of the length, width and height in inches
 - = Step 3: Mwitiel the affswer by 1 72 beight get

volume in cubic feet (1728 inches in

a cubic foot)

Cube (Cont)

 A - Add cubic feet measurements of all cargo together to get the total cubic feet requirement

- requirement
 B Add cubic feet measurements of all cargo vehicles to get the total cubic feet of cargo carrying space available
- Subtract B from A to determine external cargo lift assets required, if any
- IT IS NEVER THAT SIMPLE!!!!!!!

Cube (Cont)

- We do add cubic foot measurements of all cargo to get total cubic foot requirement
- Not all equipment comes in a rectangular shaped box
- Odd sized and heavy items require other considerations
- Maximize use of available space
- Usually will cube out before weigh out

Weight

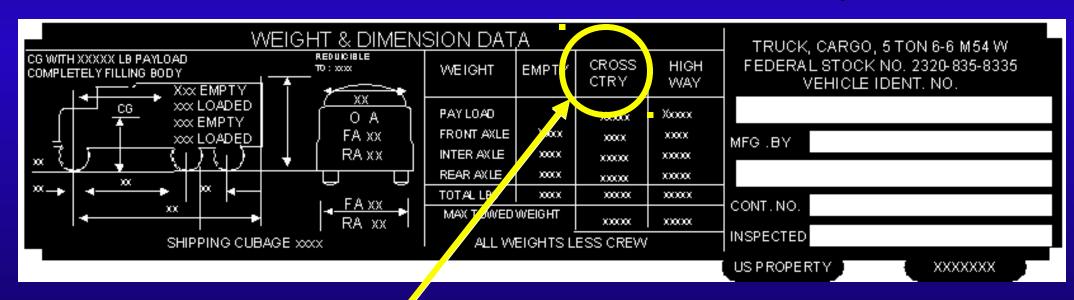
- Weight of most military cargo is marked on the package. Unmarked cargo must be weighed before loading
- Total shipment weight should equal the sum of the individual cargo weights
- Weigh loaded vehicle and record on AUEL
- Dense cargo can cause a vehicle's weight limit to be reached before the cargo space is filled

Vehicle Data Plate

- Axle weight capacity information is located on the vehicle data plate
- 3 different loading weights:
 Empty, cross country and highway vehicle weight
 Maximum loaded vehicle weight should always be the cross country weight

Vehicle Data Plate (Cont)

 <u>Never</u> exceed weight capacity of vehicle indicated on vehicle data plate



Always use cross country weight limits

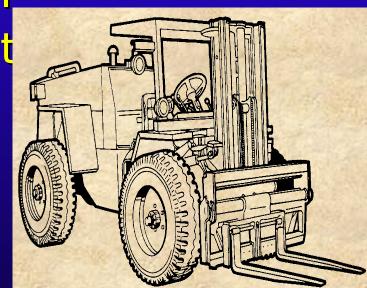
Material Handling Equipment

 Consider capabilities of available materiel handling equipment (MHE)
 Ensure MHE is staged along with required

Ensure MHE is staged along with required packing material prior to loading

MHE capacity must be equal to or greater than to

 Determine external MHE requirements (consider destination)





Loading Considerations

 Consider likely deployment configuration for vehicles carrying secondary loads

 If deploying by rail, air or sea, then the secondary load cannot exceed reduction dimensions

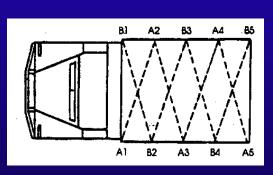
 TB 55-46-1 provides base and reduced cargo body dimensions for vehicles

Testing the Load

STEP 6: Develop Vehicle Load Plans for Unit Equipment

- Don't exceed payload capacity
- Document planned loads for organic vehicles and trailers carrying secondary loads (FORSCOM 285-R or DA 5748-R)
- Vehicles may have to be reduced according to mode of transportation and type of move
- Consider vehicle modifications (approved by MTMC TEA) and reflected in AUEL/DEL or OEL/UDL
- Test planned loads (every year for AC, every two years for RC)
- Blocking and Bracing





ORSCOM/ARNG Reg 55-1, pp.26-28 and FM 4-01.011, p.2-5/6

Balancing

• Balancing Considerations

Unbalanced loads cause

damage

• Rules of thumb on weight bahandeheavy cargo on the bottom Distribute heavy items evenly over

vehicle bed

Check vehicle data plate for maximum axle weights

Ref: FM 55-30, Para 10-5b

Load Considerations

- Pack cargo so it doesn't shift (use B & B)
- Keep load as low as possible in vehicle
- Consider multi-stops when loading
- Load items of uniform size and shape (where possible) for easier tie-down
- Use boxes and containers to move smaller items

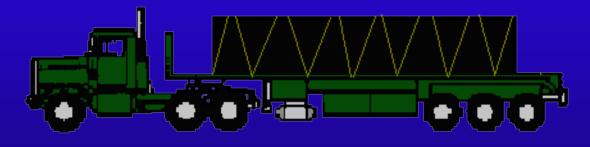
LOAD SMART!!! LOAD SAFE!

Ref: FM 55-30, Para 10-5b

Testing the Load - Loading Vehicles -

Select the right vehicle for the right job





Wrong

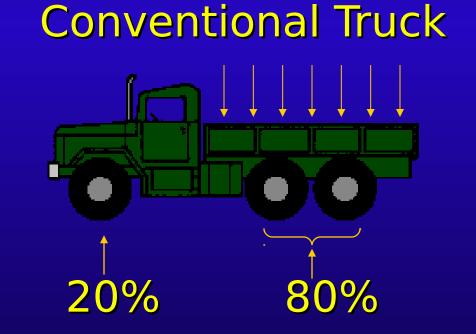
Right

Ref: FM 55-30, Para 10-5a

Load Placement in Trucks & Semitrailers

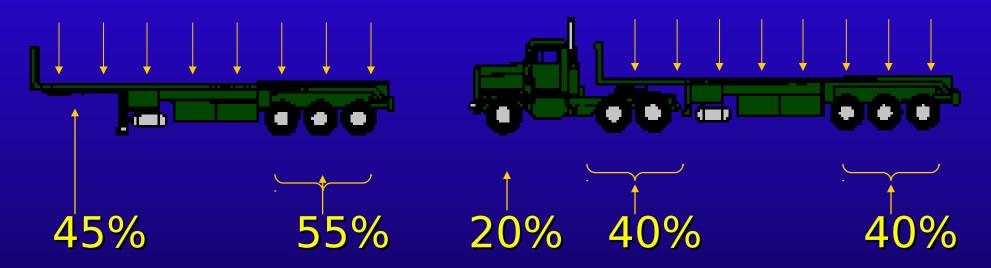
• Tires, axles & frame are designed to carry a load distributed as shown





Load Placement in Trucks & Semitrailers

• Distribute trailer Cont qually between the rear tires & the fifth wheel to ensure load transfers to the tractor



Load Placement in Trucks & Semitrailers (Cont)



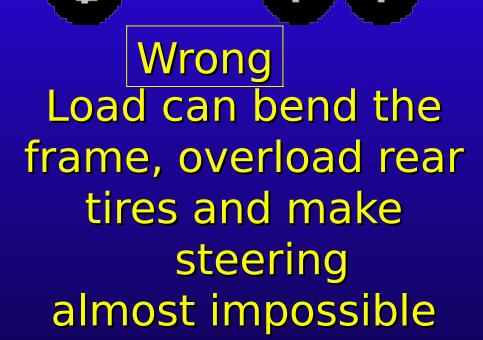
Load can bend the frame, overload front tires and make steering harder



Place Heavy part of load near rear axle for proper tire loading and to keep frame from bending

Load Placement in Trucks & Semitrailers (Cont)

Set a Right entrated load just ahead of the rear axle with the longest side on the floor



Load Placement in Trucks & Semitrailers (Cont)

WRONG

This plant overloads one spring and set of tires, brakes could lock on the

light side causing skids

שוון שוון 🕽 🎍 שוון שוון

RIGHT

Nothing is overloaded, frame will not twist and stress suspension

Containers

- Containers provide:
 - Security (seal protection)
 - Weather Protection
 - Less damage to the cargo (if loaded properly)
 - Ease in handling
 - Concentration of unit supplies/equipment

AVAILABLE CONTAINERS

Requested through the ITO QUADCON



- * Convention for Safe Containers (CSC) Reinspection Course
- * Self-paced CD (six to eight hours to complete)
- * Available from Defense Ammunition Center: cbt@dac.army.mil, DSN 956-8845 or (918) 420-8845



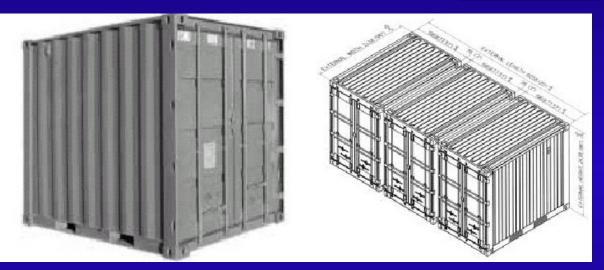


Coupling system

AVAILABLE CONTAINERS (Cont)

Requested through the ITO

TRICON





AVAILABLE CONTAINERS (Cont)



CONEX



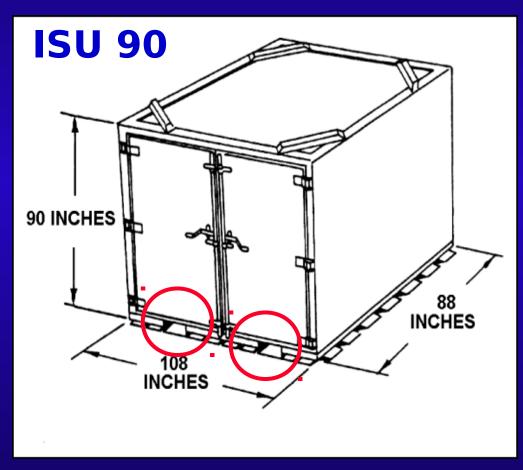
20-Foot Shipping Container



40-Foot Shipping Container

-MILVAN

ISU

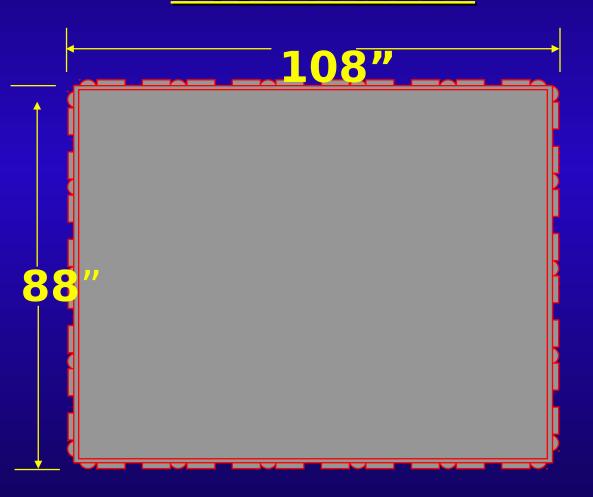


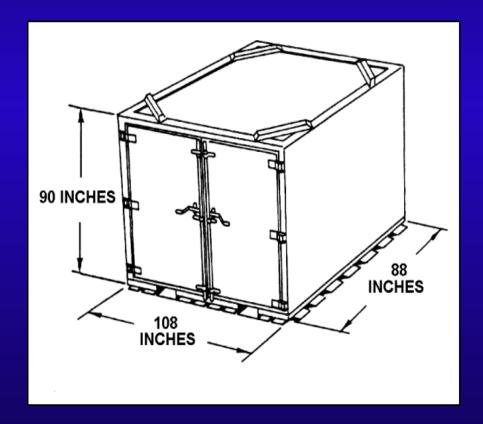


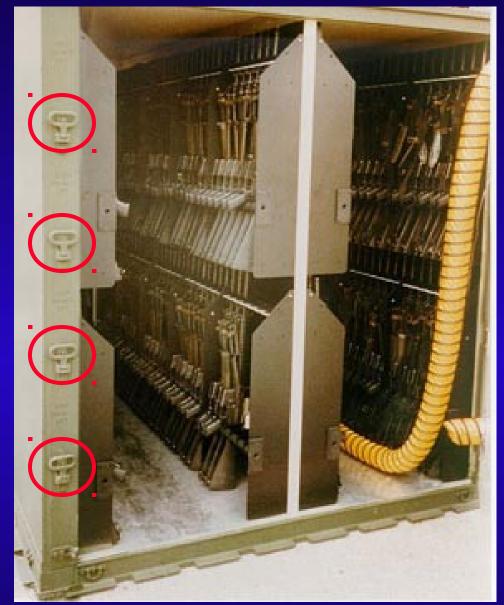
ISU (Cont)

463L PALLET

ISU 90







Weapons Rack (300x M16, 60 x 9mm pistols)



Laundry Unit (4 washers/dryers)



Container Inspection -

- Inspect Containers Prior to Stuffing (exterior)
 - Identification markings must be readable
 - Welds must not be broken, cracked or missing
 - Top/bottom rails should not be damaged
 - Door frame must not be cut, broken, or distorted
 - Locking bar guides must be serviceable
 - Roof panels should not be corroded, dented or punctured

Container Inspection -

- Inspect Contain nterior Stuffing (interior)
 - Ensure no tears or holes in sides and roof and
 - that floor boards are serviceable
 - Corner posts should not be dented, fractured, or torn
 - Ensure no rust, mold or mildew and check for
 - general cleanliness
 - There may be an added cost for exchanging

Container Considerations

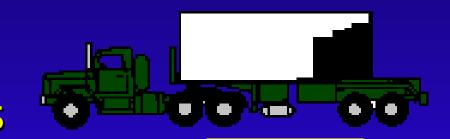
- Consider how you will receive containers If you load a container that is on a chassis, you will need a ramp or MHE for leading and a container without a chassis, you will need MHE to place the container on a chassis or truck/trailer bed once
- Cbারগিন্ধ বিছেক্টামার্য বিদ্যালয় ection requirements (inspect before the
- Container is loaded)
 Consider BBPCT requirements

Stuffing Containers

- Stuffing Containers
 - Distribute weight evenly over the container floor
 - Heavy cargo on bottom, lighter cargo on top
 - Fill space between cargo and containers sides with blocking and bracing
 - Keep CB as near as possible to the center
 - Do not overload the container

Load Placement in Containers

This placement secrens tire Wrong life & bends the trucks rearaxle housing; applying trailer brakes may lock the wheels & cause flat spots &



Wrong This placement overloads the trailer rear wheels so that brakes will not function properly & rubber scuffs away

Load Placement in Containers (Cont)



This container is loaded with the load spread low

on the floor. (What is missing from picture?)

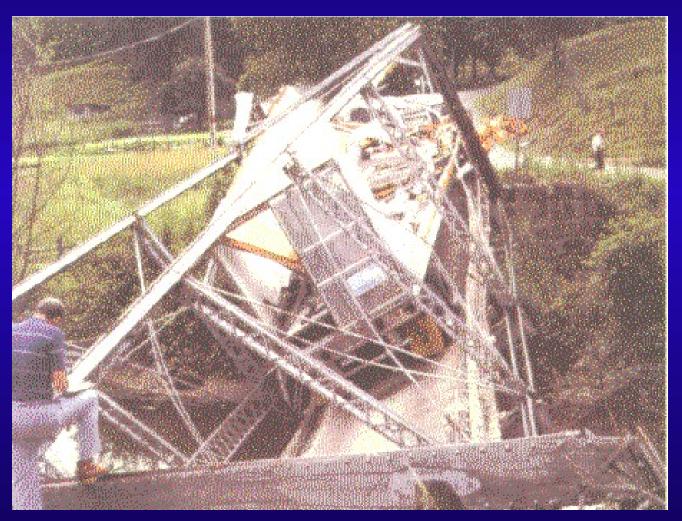
Record Weight

- Record weight & compare to the AUEL Verify the actual weight & dimensions of each piece of cargo, and vehicle with
 - Update AUEL if discrepancies are found
- You must <u>physically weigh</u> each vehicle after it is loaded

NEVER EXCEED VEHICLE'S CROSS
COUNTRY WEIGHT LIMITS

Lessons Learned

Tractor
 trailer that
 overloade
 d a bridge



SUMMARY

- Planning the Load
 - How to calculate the cubic feet required for cargo shipments, and how to determine if external cargo lift assets are required
 - Vehicle weight limitations
- Testing the Load
 - Loading consideration for vehicles
 - Use of containers, including loading considerations

Inspecting the Load

Preparing Vehicles For Shipment

- Thoroughly clean vehicles (Customs)
- Ensure vehicles are mechanically sound (free of leaks, drips and other defects)
- Fill vehicle fuel tanks to a maximum of 3/4 full
- Do not fill the fuel tanks of trailer mounted equipment (such as generators) to more than 1/2 a tank
- Ensure tiedown/lifting devices are serviceable

Preparing Vehicles For Shipment (Cont)

- Shipment (Cont)

 Secure ignition keys to steering wheel with wire
- Ensure fire extinguishers are in approved brackets
- Do not lock driver compartments
- Consolidate radios and crew-served weapons in separate secured containers
- Basic Issue Items (jack, tools) stored in tool box (locked/banded)

Preparing Vehicles For Shipment

Reduction

 Operational configuration for moving as convoy (reduction will occur in POE staging area if required)

- When vehicles are shipped
 - Reduce vehicle length and width by folding in side-mounted mirrors
 - Remove antennas
 - Keep windshields and cab canvas in the 'up' position
 - Leave exhaust stacks in place
 - Reduce further only of specified in the

Securing Cargo in Vehicles and Containers

Packing Materials

- Types of packing materials:
 - Bubble wrap
 - Foam packing
 - Corrugated cardboard
 - Desiccant to dehumidify
 - Pneumatic & mechanical holding devices
- Materials also needed to close and secure boxes/cartons

Containers

- Rules for loading containers: Block & brace the cargo bottom, sides & front (stay 6 inches away from the dogs bute the weight evenly - heavy items on the bottom of the container never overloadPackage liquid on dunnageGroup cargo according to use at

 - destination for ease of handling when off-loading

Containers (Cont)

SIX INCH GAP BEHIND DOOR

BLOCKING FOR EMPTY

USE DIVIDER SHEET BETWEEN

DIFFERENT SIZE / TYPE

SPACE ABOVE CARGO CARGO LIGHTER **CARGO ON TOP** D 0 0 HEAVY **CARGO** ON BOTTOM

BLOCKING & BRACING

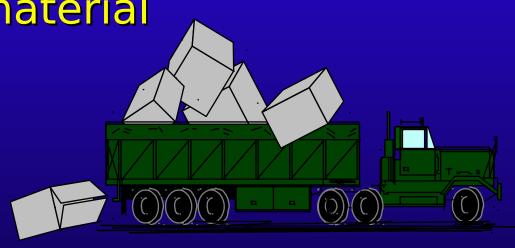
DUNNAGE LAYERS OR PALLETS FOR POSSIBLE DRAINAGE

Blocking, Bracing, Packing, Crating, Tiedown (BBPCT)

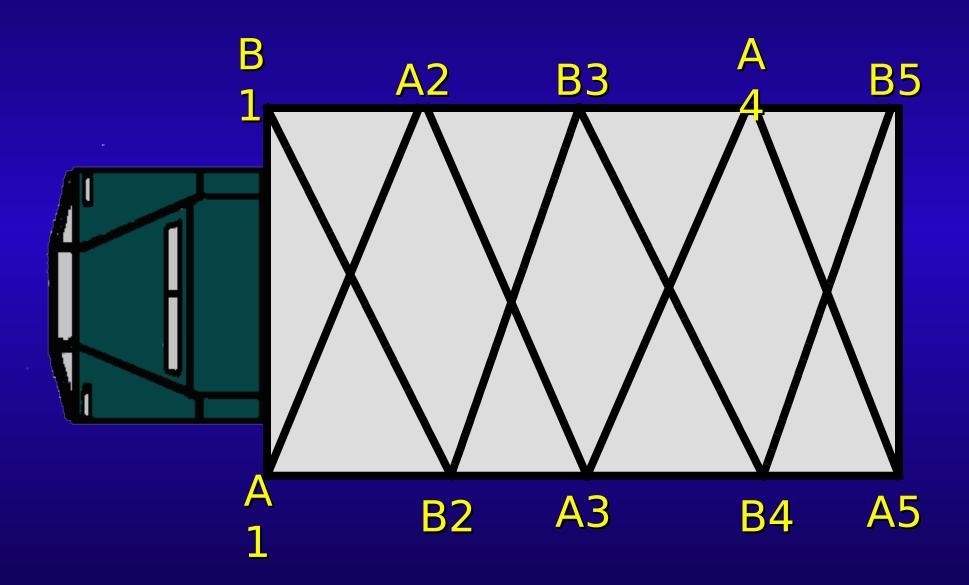
- Units are responsible for securing their cargo
- Lashing should be:

1/2" manila rope, wire rope or banding material

- Secure rope to vehicle via hooks/rings on the vehicle's sides



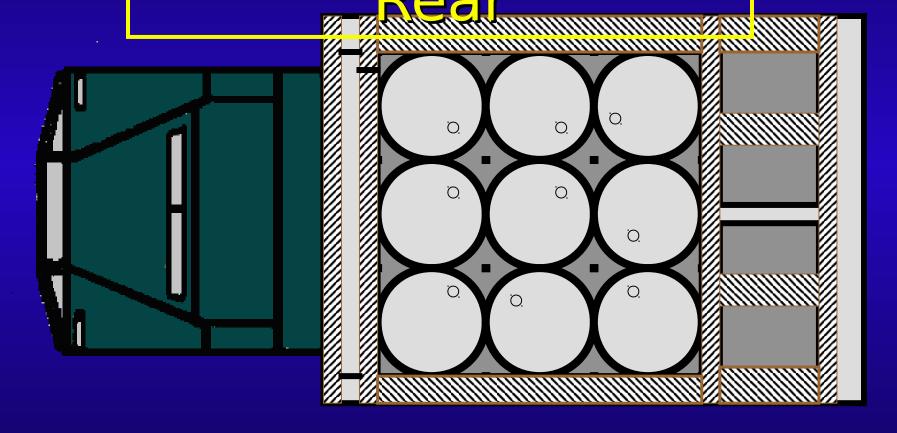
Lashing



Blocking & Bracing

- Your unit is responsible for the blocking & bracing of unit equipment and containers
 - Use crib blocking whenever possible
 - Block cargo on all sides: front, back, sides & door area
 - Ensure there is no metal-to-metal contact (Use plywood, wood or cardboard)

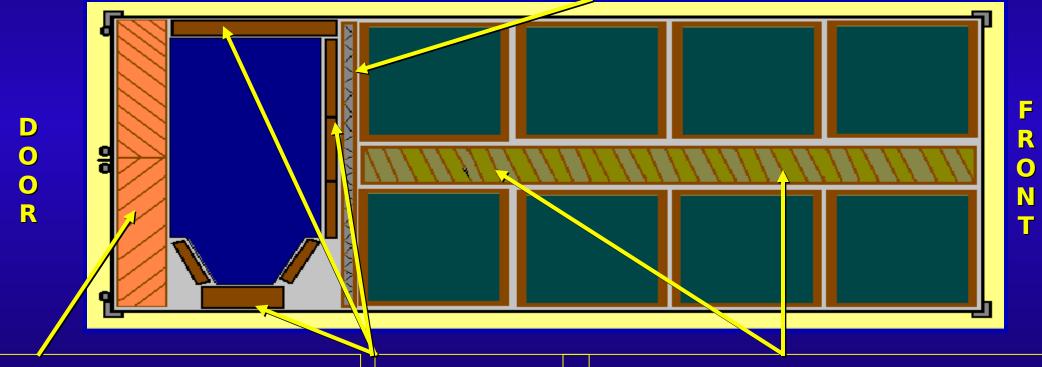
Blocking & Bracing a 2-1/2 Ton Truck



All - Denotes Blocking & Bracing

Blocking & Bracing a Container

False wall / side to side bracing



6" B & B at door | Blocking B & B between pallets

Loading Containers

- Once a container is blocked and braced:
 - Close and seal doors carefully (use serial numbered seals if provided)
 - Weigh the container and check its documentation
 - Place one copy of its packing list on the inside of the container door and one on the outside (in clear plastic sleeve for weatherproofing)
 - If carrying HAZMAT; load, label, and placard as appropriate

Cargo Protection

- Protecting cargo from weather & elements is a <u>unit responsibility</u>
 - Place dunnage over corners to protect canvas
 - Cover open topped vehicles with canvas before lashing
 - Protect crew-served weapons from elements with a coating of grease

Marking of Vehicles

Proper marking of unit vehicles and equipment:

FORSCOM/ARNG Reg 55-1, requires marking on front and back

Use 2" lettering placing UIC and SUN on bumpers

Suggested to mark all Secondary loads that may be moved separately

See App G to FORSCOM/ARNG Reg 55-1

Inspecting the Load

- Once loading is completed, inspect the vehicle to ensure that:
 - Its overall dimensions (length, width and height) are in compliance with the applicable reduction policy
 - Its overall weight is in compliance with stated vehicle limitations





SUMMARY

- Inspecting the Load
 - Preparing vehicles for shipment
 - Securing cargo loads in vehicles and containers (lashing, and blocking and bracing)
 - Cargo protection (weatherproofing)
 - Vehicle weighing and marking

Special Cargo Considerations

Types of Special Cargo

- Hazardous cargo (discussed in another lesson)
- Other Categories
 - Sensitive items
 - Classified material
 - Pilferable items

Sensitive Items

- Reference is FM 4-01.011, Appendix D
- Sensitive cargo is cargo that could threaten public safety if compromised (eg. weapons)
- Sensitive cargo must be secured and identified to port personnel so they can provide appropriate security
- Remove crew-served weapons from vehicles.
 Place them in containers that are sealed and secured with an approved locking device
- Provide guards or escorts when shipping sensitive material by rail

Sensitive Items

Rules for sensitive cargo: Packing material mustbe strong and durable enough to provide security protection in transit Containers, vehicles or compartments must be secured with appropriate locking device. Also place a serial-numbered seal on the door (serial number entered on unit packing list) Sensitive items must be identified in the commodity code of the unit's AUEL/DEL (OEL/UDL)

The outside of container/vehicle/compartment must NOT indicate in any way that it contains

- Classified Cargo

 Classified cargo is cargo that requires protection in the interest of national security (eg. codes)
- Classified material must be enclosed in two sealed containers: inner and outer container (comply with AR 380-5)
- Must NOT be identified as classified on the outer container
- Packing material must be strong and durable enough to provide security protection in transit, to keep items from breaking out of the container and to help detect any tampering with the container wrapping must conceal classified characteristics
- Not to be stored in any detachable storage Ref: FM 4-01.011, p.D-5

Classified Cargo (Cont)

- When crossing international borders, arrangements must be made to ensure that customs, border or other inspectors (either US or foreign) do not open the classified material
- Containers, vehicles or compartments containing classified material must be secured with an appropriate locking device.
 Also place a serial-numbered seal on the door (serial number entered on packing list)
- Unit authorizing the transportation of classified equipment must notify their ITO/MCT and an appropriate carrier in advance
- Shipping classified material by rail may require the commander to provide guards or escorts
- When traveling by motor convoy, escorts must maintain constant surveillance of classified material (stay within escort's personal possession/observation at all times)
 Ref: FM 4-01.011, p.D-5

DD Form 1907

SIGNATURE AND TALLY RECORD (See DoD 4500.9-R for guidence) (Use of equivalent carrier-furnished signature and tally record is seceptable.) The paste separing backs for this collection of Identition. A satisfied to watery 3 mitules per respects, including the time for reviewing instruct orar, sourcing shall gues seweres, patheting and maintaining the able mented, and completing and redeving the collection of Information. Bend columnia topoliting instruct orar, sourcing shalling uses seweres, patheting or distribution, between unspreadors for reducing on Suitable. Severally suggestions for reducing on Suitable. Severally suggestions for reducing on Suitable. Severally suggestions for reducing the Suitable several time record scrattering and deep reducing the facility to several time record scrattering and deep provide or distributions of suitable to the support of the suitable to the suitable several time record scrattering and other provides of time, as person shall be PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS. RETURN COMPLETED FORM AS DIRECTED IN THE DISTRIBUTION			• DD Form 1907					
INSTRUCTIONS BELOW.	ADDRESS. RETORN COMPLETED FORD	N AS DIRECTED IN THE DISTRIBUTION				,		
(1) The SHIPPER will print two copies, retain one copy (2) The ORIGIN CARRIER will deliver one copy with or (3) The DESTINATION CARRIER will attach one copy Trensportation Charges, to the original Governmen DD Form 1907 will be delivered to the Consignee of (4) The Cohicies will never beginning the consignee of	Idard Form 1113, Public Voucher for Reproduced completed copy of	13. NUMBER OF				OF PIECES		
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1a. SHIPPER NAME	b. ORIGIN							
2. PROTECTIVE SERVICE REQUESTED	OTECTIVE SERVICE REQUESTED 3. GBL OR CBL NUMBER		2 BE COMPLETED BY EACH PERSON ACCEPTING CUSTODY OF CLASSIFIED OR PROTECTED MATERIAL REQUIRING THE USE OF TRANSPORTATION PROTECTIVE SERVICE DURING TRANSIT					
4a. CONSIGNEE NAME	b. DESTINATION	6-1	ON AND INTED	STATION INTERCHANGE POINT DESTINATION b.	SIGNATURE OF PERSON ACCEPTING CUSTODY C-	ACCEPTED d.	DATE ACCEPTED (YYYYMM/DD)	
5. PERMIT NUMBER (If any)	6. TRANSPORTATION CONTROL NUMBER			·. · · · ·				
7. ROUYING	e. WEIGHT	9. CUBE						
10. SPECIAL INSTRUCTIONS		11. DATE SHIPMENT TENDERED TO CARRIER (YYYYMMOD)						
12. NAME OF CARRIER		13. NUMBER OF PIECES						
		DD FORM 1907 M	AV 2000	PREVIOUS EDITION	LIG ORGOLETE			

Pilferable Items

- Pilferable items are items of value to individuals that can be readily removed and concealed (radios, binoculars compasses, etc.)
 - Consider removing pilferable items from vehicles and packing them together in a separate container (also facilitates movement tracking)



Security

- Be prepared for acts of sabotage, espionage and terrorism in both CONUS and OCONUS theaters
- Guard against theft and pilferage
- Degree of security required will determine
 - the need for outside support
- References: FM 100-20, AR 380-

SUMMARY

Sensitive Items

Classified Cargo

Pilferable Items



Documenting the Load

Forms Used

• Forms:

- FORSCOM Form 285-R, Vehicle Load Card
- DD Form 1750, Packing List
- DA Form 5748-R, Shipment Unit Packing List and Load Diagram
- DD Form 1387 Military Shipment Label
- Destination Placard
- Radio Frequency Identification Tags
- Shippers Declaration of Dangerous Goods
- DD Form 626, Motor Vehicle Inspection (Transporting Hazardous Materials)
- DD Form 836, Dangerous Goods Shipping Paper / Declaration and Emergency Response Information

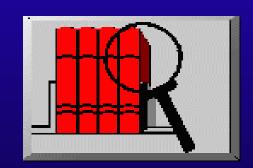
Vehicle Load Card

FORSCOM Form 285-R

- Vehicle Load plans are documented on FORSCOM Form 285-R
 - FORSCOM Form 285-R must be filled out for all vehicles which have a cargo load
 - Load plans are kept on file as part of the unit movement plan and revised / tested annually

FORSCOM Form 285-R (Cont)

- Load cards can also be used to check cargo at terminals:
 - Check for loss or damage
 - Ensure particular cargo can be located when needed
- See example Form 285-R in FORSCOM/ARNG Reg 55-1, page 35



			ani	C					<u>rc</u> _		
(TB 55-46-1 & 2) and (FORSCOM Reg 55-1)											
им пт/и іс 		VEHL			EN/MOD NO		SEC/PLT ASGD	- 1,	SHIPMENT UNIT NO		DATE COMPILED
LENGTH OPERATIONAL	OF VEH REDUCE)	OPERA TIO		OF VEH REDUCED		HEIGHT OPERATIONAL		nced EH	VН	EMPTY WT
CARGO AREA CUBIC FT											
LENGTH WIDTH HEGHT OPERATIONAL REDUCED											
NOT	COMPUTE	D FOR	HSTO MS		TEST LO	DAC	VERIFIED BY				DATE
NOT COMPUTED FOR HS TO MS CR/CG IS N CHES FROM CARGO COM FORM 285-R CARGO COM FORM 285-R CARGO COM FORM 285-R											
CARGO											
		1	FO	25	COM						

Placehicle Load Card here



Unit Name and UIC

Vehicle LiN and Index

Note in the Note in

Ref: FORSCOM/ARNG Reg 55-1, p.35No. of vehicle



Section / Platoon Shipment Unit No. (assigned by

AUEL/OEL)
Date Compiled (YYYY/MM/DD



Depending on the planned shipping configuration, either operational and/or reduced entries are made under length, width, and height of the vehicle.

Jnder Bows Cargo Boay Lbading Hengatohot Cargo Deck Bed Heigh



Normally 'Under Bows Capacity'

Normally 'Top of Side Racks Capacity'

Dimensions and Weight of the cargo



Center of balance / center of gravity (CB/CG) in inches

Point CB / CG calculated from (ref point) i.e. FFE = forward front edge

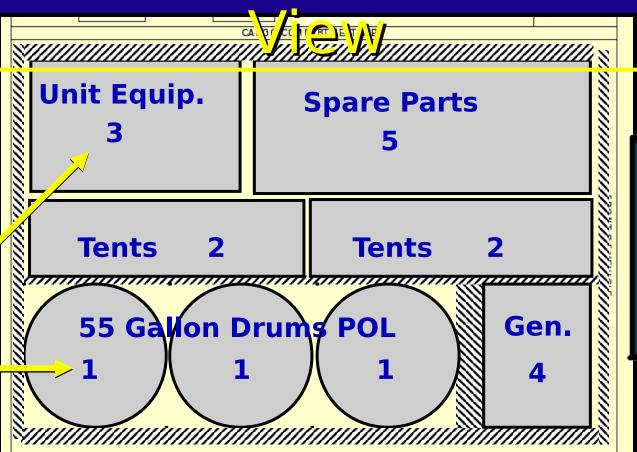




Verified by (in pencil)

Date verified
(YYYY/MM/DD)
(in pencil)

FORSCOM FORM 285-R Cargo Compartment



Cargo'

Location

Numbers

Cargo compartment view Ref: FORSCOM/ARNG Reg 55-1, p.35

CARGO LOC CARGO DESCRIPTION & TYPE PACK NO OF ITEMS PC CUBIC FT CUBIC FT PC WT TOTAL 1 POL - 55 Gal Drum 3 6.8 20.4 380 11	
1 POL - 55 Gal Drum 3 6.8 20.4 380 11	A L WY I
	.40

Cargo description for the three 55 gallon drums shown in the Cargo Compartment View section of the previous page



Location number from drawing

Cargo descriptio n and type pack

Number of items in this location



CuFt of each piece

Total CuFt Each
piece
weight
(pounds)

Total
weight of
this
location
(pounds)
88



Location number from drawing

Number of items in this location

Total weight of this location

Cargo Description

TDA/MTOE PARA AND LIN NO OF DRIVER

16650

Para 109 Line 03

FORSCON Form 285-R, 1 Mar 93 EDITION OF 1 AUG 80 MAY BE USED. 5-1/23

Total weight of load plus empty vehicle weight (AC)

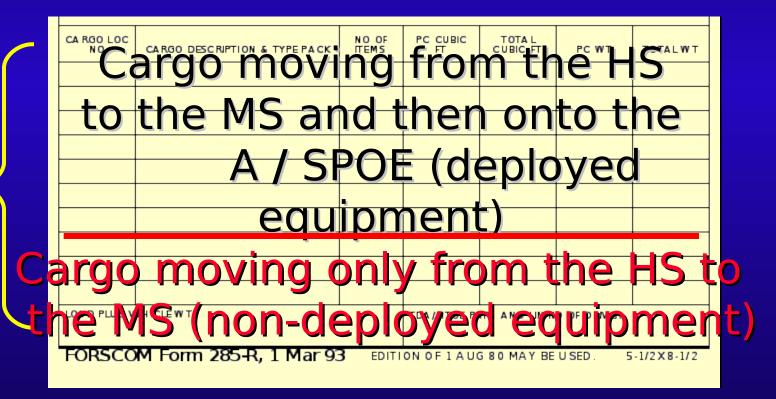
MTOE Paragraph and Line No. of Driver

Total weight of items loaded above the red line plus empty vehicle

Reserve Redline Concept...

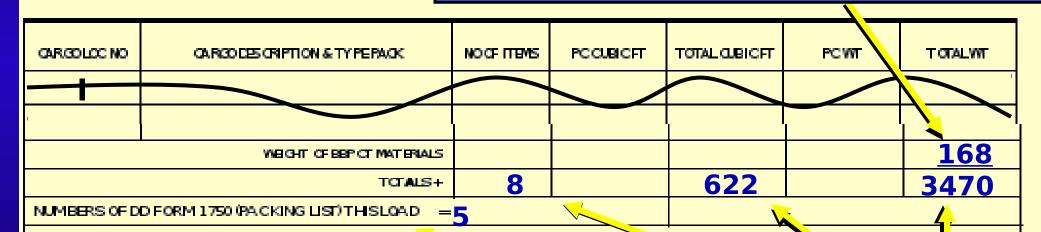
• Redline-concept is only used by the Reserve component

Total cargo movin g from HS to MS



Reverse side of form, top

REXENSE ht of BBPCT material



Total No. of DD Form 1750 (Packing Lists) for Ref: PORSCOM/ARNG Reg 55-1, p.36

Totals (Items, cube & weight)

RELIEUS AND THE PROPERTY OF TH

4 ea 4 X 4 X 12 80
12 ea 2 X 4 X 8 48
2 ea 5/8" Plywood 4 Ft X 8 Ft 40
168lbs

Remarks:

List BBPCT materials needed for cargo load - include weight

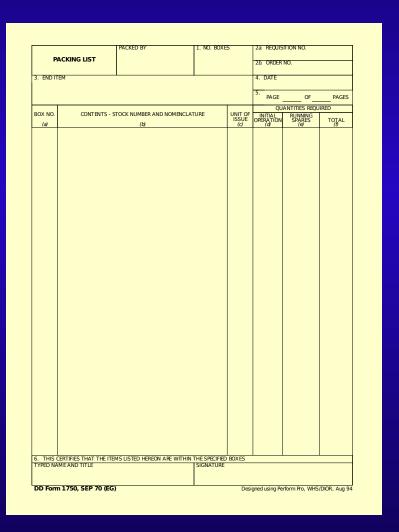
DD Form 1750

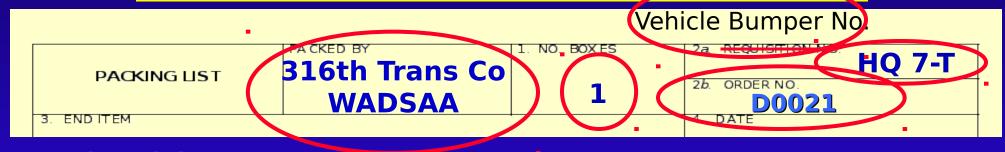
Packing List

DD Form 1750 Packing List

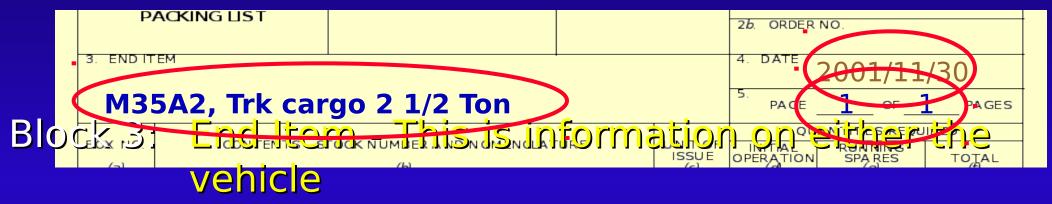
DD Form 1750

Must be prepared for EACH multipack box or container





Packed by: Enter your unit name and UIC Block 1: Number of inner boxes in the container (if Block 2a: relates to state that here the this to "Vehicle Bumper Number" or Block 2b: "Consmersian Container Berrham" AUEL/OEL or DEL/UDL for the vehicle/container



carrying the cargo (as shown) or the shipping container

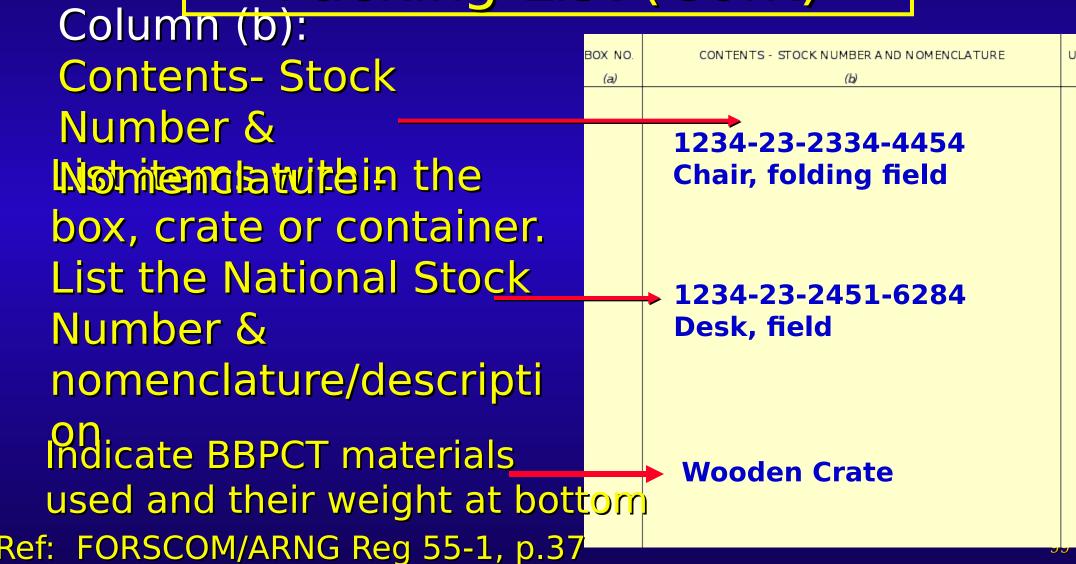
'Box Shipping Metal 20ft. Serial #54280, HHC Seal Block 4: pate form compiled (YYYY/MM/DD) - Enter in

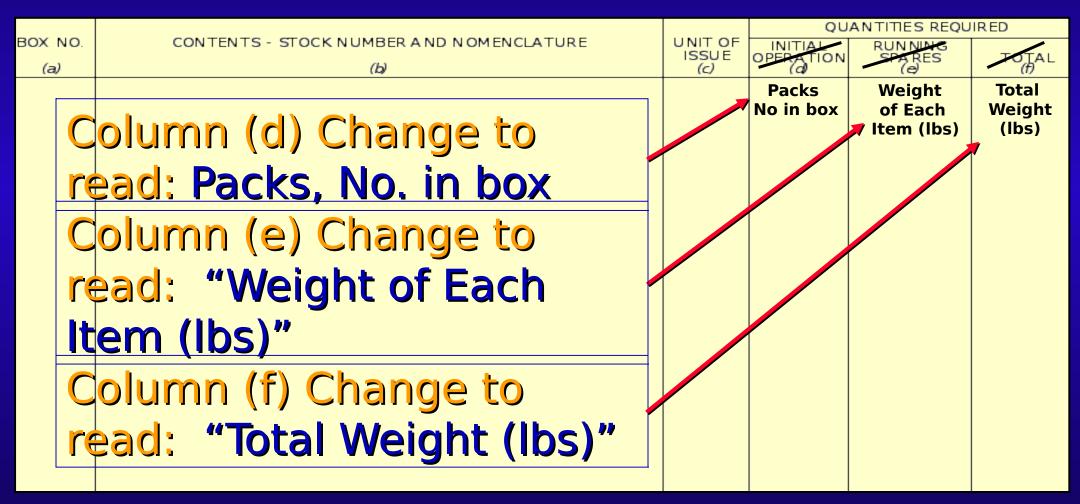
- Be specigencil Block 5: Page number - Enter page number & total number of pages

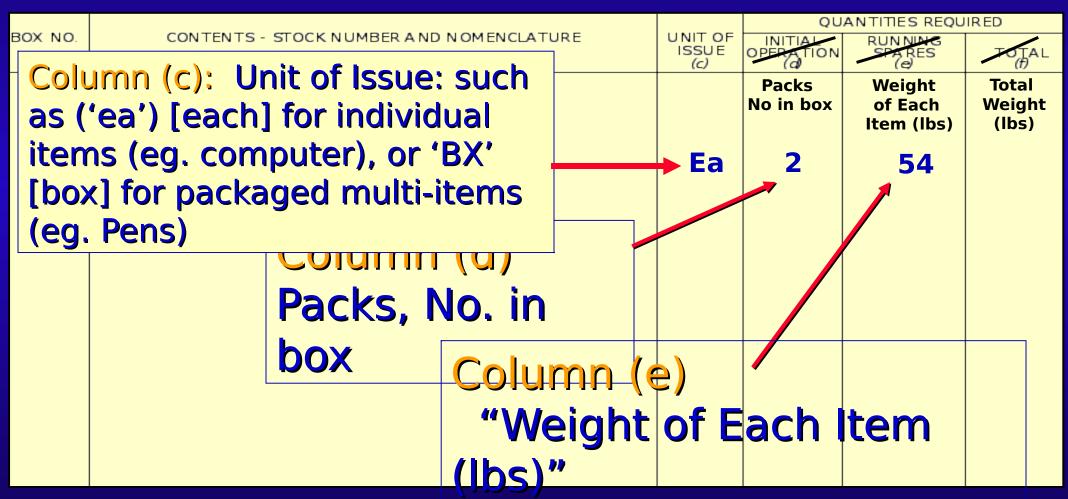
BOX NO

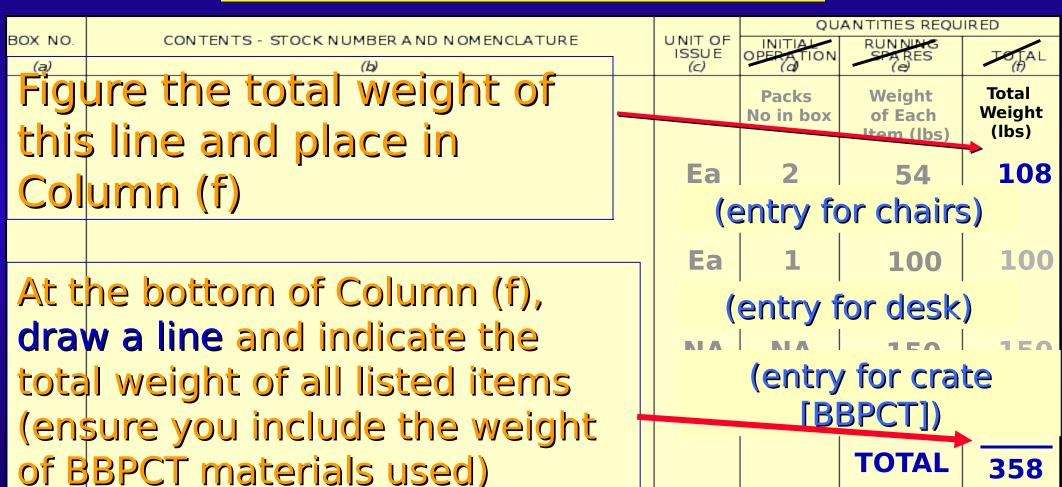
Column (a): Box No.

Use when shipping 2 or more boxes in a container to indicate the box number in which the items are packed. If form is for a single box/crate leave blank Ref: FORSCOM/ARNG Reg 55-1, p.37

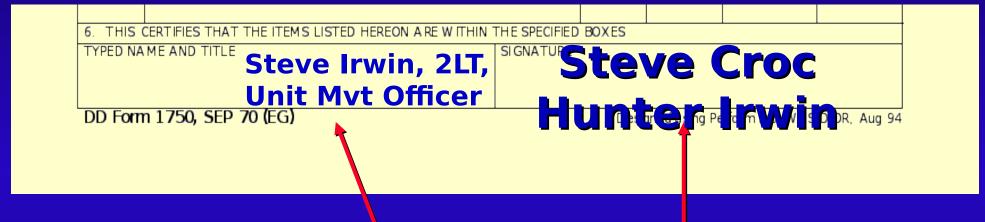








			QU	ANTITIES REQU	IIRED
BOX NO.	CONTENTS - STOCK NUMBER AND NOMENCLATURE (b)	UNIT OF ISSUE (c)	INITIAL OPERATION	RUNNING SPARES	TOTAL
	Must add statement: "This box (container) does (does not) contain hazardous material IAW 49 CFR "		Packs No in box	Weight of Each Item (Ibs)	Total Weight (lbs)



Block 6: Name and title (rormally primary or alternate UMO)

Block 7: Signature

DA Form 5748-R

Shipment Unit Packing List and Load Diagram

DA Form 5748-R

- Can be used as a substitute for:
 FORSCOM Form 285-R or
 DD Form 1750
- Basically the combination of these two forms

DA Form 5748-R (Cont)

SHIPMENT UNIT PACKINGLIST AND LOAD DIAGRAM For use of this form; see RM 55-65; the proponent agency is TRADOC				PAGE OF			
1 DEPLOYING UNIT		2 UIC OR BUMPER NO).	3. TON OR SEAL NUMBER			
4 SHPM BNT UNIT DESCRIPTION		•		5. DATE PACKE)		
6. LENGTH	7. WIDTH	8. HBGHT		12. LOCATION OF CG			
9. CUBE	11 LOADED WEIGHT						
13. PACKING UST	1	1		-			
CARGO LOC. NO. a	CONTENTS (Descript ion and Nomenclatur b	ne)	TYPE PKG. C	PKG. QTY. d	PKG. WBGHT. e	TOTALPKG. WBGHT. f	

DA Form 5748-R (Cont)

	at items listed hereon are contained w		kages
a. TYPED NAME	b. GRADE	o. TITLE	
d. SIGNATURE	,	•	e. DATE

DA Form 5748-R (Cont)

SH PMENT UN For use of this for	PAGE OF			
1 DEPLOYING UNIT A Co. 1-1	O IN WABCA	2 UIC OR BUMPER NO. A-41	3. TONOR SEAL NUMBER AWAF6A1\$0	D00010XX
4 9HPM BNT UNIT DESCRIPTION			5. DATE PACKED	†
6. LENGTH	7. WI DTH	8. HBGHT	12. LOCATION OF CG	

Block 1: Deploying Unit (Designation and UIC)

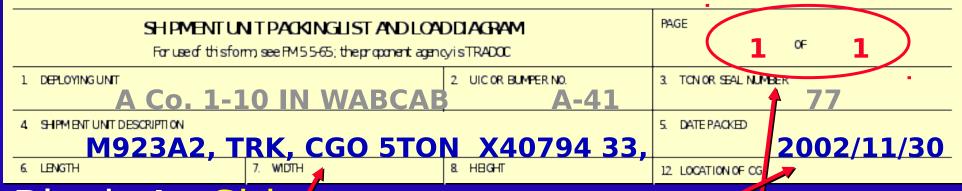
Block 2: Bumper Number/Container

Identification Number

Block 3: TCN or Container Seal

Number

DA Form 5748-R (Cont)

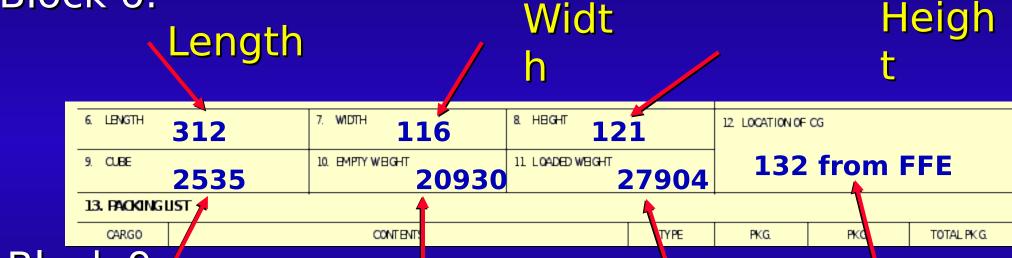


Block 4: Shipment
Description
(model, nomenclature and
LIN/LIN Index)
Block 5: Date Packed
(YYYY/MM/DD)

Note: use this block for continuation pages



Blocks 6: Block 6: Block 6:



Block 9:

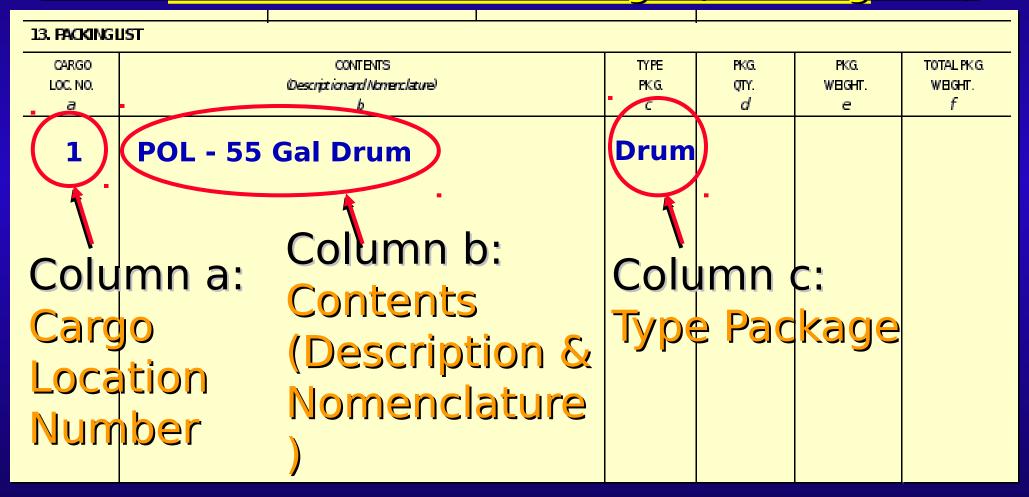
Cube

Block 10: Empty Weight

Block 12: Location of CG

Block 11: Loaded Weight

DA Form 5748-R Blocks 13 relates to เคยเล้าgo (Packing List)



DA Form 5748-R (Cont)

CARGO	CONTENTS	TYPE	PKG.	PKG.	TOTAL PK.G.
LOC, NO. a	(Descript ion and Nomeric lature) b	PKG.	QTY.	₩ВОНТ. е	WBGHT. €
1	POL - 55 Gal Drum	Drum	3	38	114
	Column d:	Colu	ımn (e: Col	umn i
	Package		kage	Tot	al
	Quantity	We	ight	Pag	ckage
		(ea	ch)	We	ight

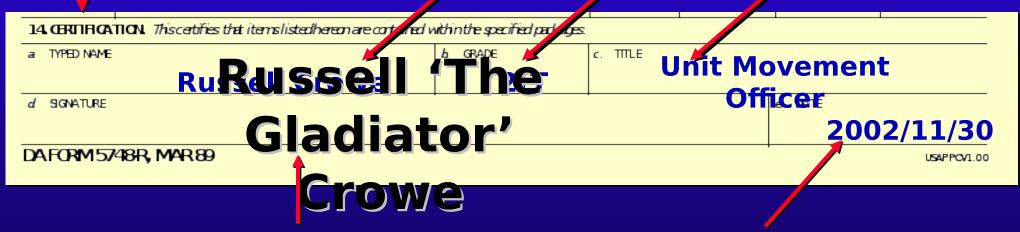
DA Form 5748-R (Cont)

CARGO LOC. NO. a	CONTENTS (Descript ion and Nomenclature) b	TYPE PKG. C	PKG. QTY. d	PKG. WBGHT. e	TOTAL PK.G. WBGHT. <i>f</i>
1	POL - 55 Gal Drum	Drum	3	38	114 0
	Indicate BBPCT mat	erials	sused		
	and their weight at	the b	otton	n of	
	block 13				
DDDCT	120 ft 4 X 4				
BBPCT	100 ft 2 x 4				250
	7 lb 2 x 4				
	4 CGU-1 CGO Straps				

DA Form 5748-R (Cont)

Block 14: "Certification: This certifies that items listed herein are contained within the specified

Blocks a-c: Typed Name / Grade /
Title /

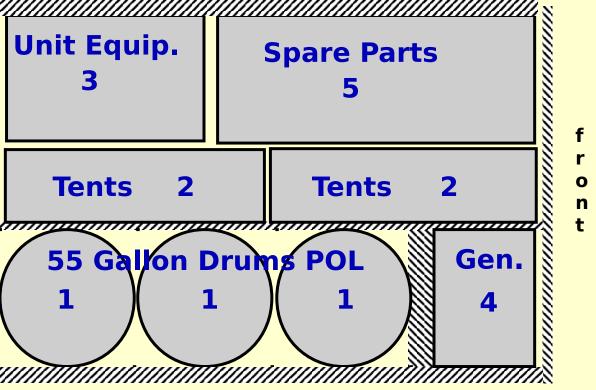


Block d: Signatur&lock e: Date (YYYY/MM/DD

DA Form 5748-R Reverse

15. LOAD DIAGRAM (Sketch cargo storage in space below)

Block 15:
Load Diagram
(Sketch cargo
storage
location)



DA Form 5748-R Reverse (Cont)

16. REMARKS

Tents are banded to warehouse pallet in two groups at location 2

Block 16:

Remark

S

REVERSE OF DA FORM 5748-R, MAR 89

- All vehicles (containing secondary cargo), containers, 4630 pullets, and the sum of the secondary cargo), containers, 4630 pullets, and the sum of the secondary cargo), containers, 4630 pullets, and the sum of the secondary cargo), containers, 4630 pullets, and the secondary cargo pullets are secondary cargo pullets, and the secondary cargo pullets are secondary cargo pullets.
- Items that are not transported in a container/crate - such as banded shovels, do not require a packing list. However, these items must be listed on the load diagram if they are loaded on a truck or in a container
- A packing list is not required for a container that already has a contents list - such as a toolbox
- Do not list classified material on packing lists

Documentation

- · Packing Requirements (Cont) follows:
 - One copy is filed in the unit movement plan
 - One copy is placed on the outside of the shipment unit where it is easily visible/accessible (placed inside a clear plastic sleeve for weatherproofing)
 - One copy is placed inside the shipment unit (includes sensitive item serial numbers)
 - One copy is prepared for the unit's representative (liaison team or supercargo)
 - One copy is retained by the hand receipt holder

Sensitive Items Packing List (Inside Container

			QU	ANTITIES REQU	IR <mark>E</mark> D
BOX No.	ensitive items listed individually	ISSUE	OPERATION	RUNNING SPARES (e)	TO(AL
	y serial number	y	Packs No in box	Weight of Each Item (lbs)	Total Weight (lbs)
1	NSN 8315-06-123-456 NVG ANPVS 7b Serial Numbers: B1234, B1235, B2345, B3456	EA	4	2	8
2	Paper, Toilet	вх	4	3	1 2
3	Fluid, Correction	вх	1	2	2

Never place this packing list on the outside of a container. The Sensitive Items Packing List is only placed on the inside of a container

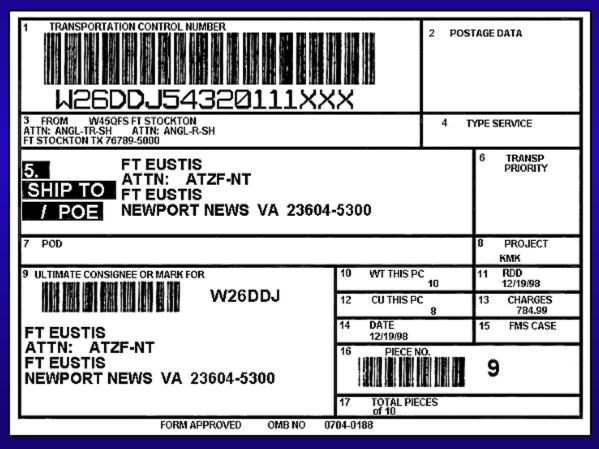
Sensitive Items Packing List (Outside Container

			QU	ANTITIES REQU	IR <mark>E</mark> D
BOX No	(b)	ISSUE (c)	OPERATION	RUNNING SPARES (e)	TO TAL
	Note: No sensitive items liste	d	Packs No in box	Weight of Each Item (lbs)	Total Weight (lbs)
1	Paper, Toilet	вх	4	3	1 2
2	Fluid, Correction	ВХ	1	2	2

Always place a DD Form 1750 on the outside of your container that *does not* list the sensitive items

Military Shipment Label

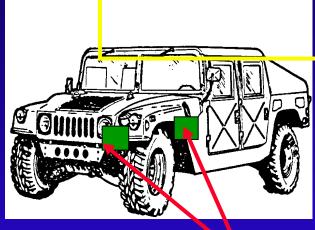
Military
Shipment
Label

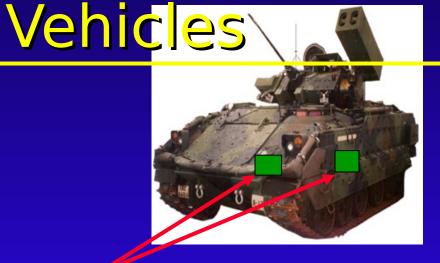


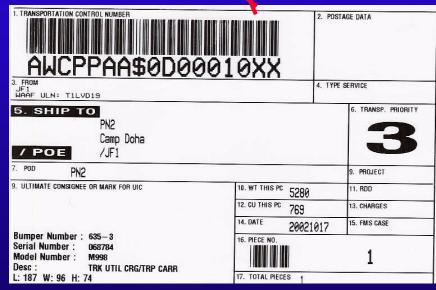
MSL Guidelines

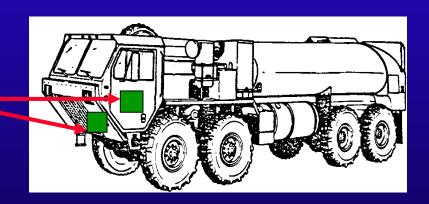
- Weigh and measure the dimensions of vehicles/containers and update DEL/UDL prior to printing MSLs - information shown on the MSLs must be accurate
- Ensure MSLs can be easily found (so that they can be scanned at transit locations)
- Do not mark the barcode for any reason it will make it unreadable (if the label must be physically marked to show it has been scanned - mark somewhere other than the barcode)
- If the load of a vehicle/container is changed a new MSL must be produced
- When attaching MSLs, ensure the surface area where the label will be attached is clean and dry - this allows the adhesive on the label to stick
- Remove MSLs once the deployment is complete

MSL Placement -







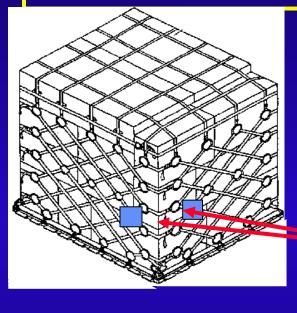


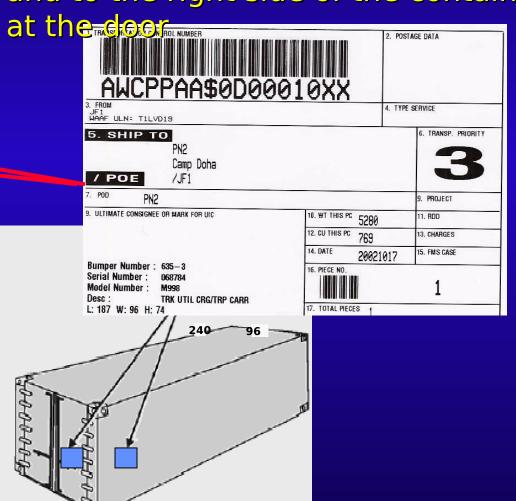
tach MSLs to left front bumper (driver's side) and left side door (driver's d

MSL Placement -

Paide MSLs on one end and on the adjacent and for side same habital sales, and for

containers, attach MSLs to the right side door and to the right side of the container as you look





DESTINATION PLACARD

int on 8.5 imes 11 inch paper and place in a clear sealed plastic

Unit: 118th INF BN, 2nd BDE, 1ID

UIC: WTA377
ULN: CDAAP30

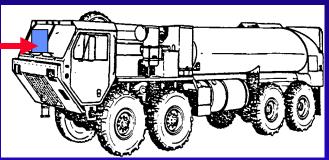
Destination: Kosovo (Camp

Bondsteel)

Unit: A Co., 1-36 INF BN, 1st BDE, 1AD

UIC: WAE3A0 ULN: EDAAP15

Destination: Kuwait (Camp Doha)







BDE, 1AD

UIC: WAE3A0
ULN: EDAAC15

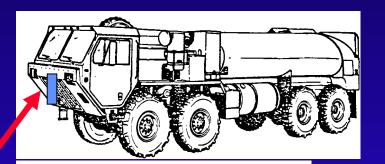
Destination: Kuwait (Camp

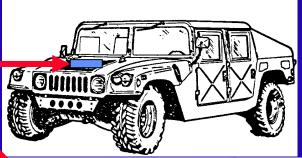


- Radio Frequency Tags

 If Radio Frequency Identification (RFID) tags are being used the required information must be entered before departing your home station
- RFID Tags are mounted (using two long nylon strips more durable than plastic straps) as follows:
 - Vehicles: Attached to the top of the radiator grill (wheeled vehicles)/front of the vehicle (tracked vehicles)
 - Containers: Attached to the locking bar located on the door near the upper right-hand corner - you may also use zip ties to attach the RFID tag to containers (do not drills holes in containers to mount the tags)
 - 463L Pallets: Placed adjacent to the MSL
- Tie down both the top and the bottom of the tag so that it will not bounce and be damaged during shipment
- Note that the data on the RFID tag must be updated if the

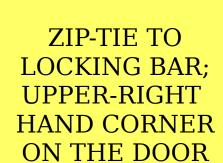
RFID Tag Placement









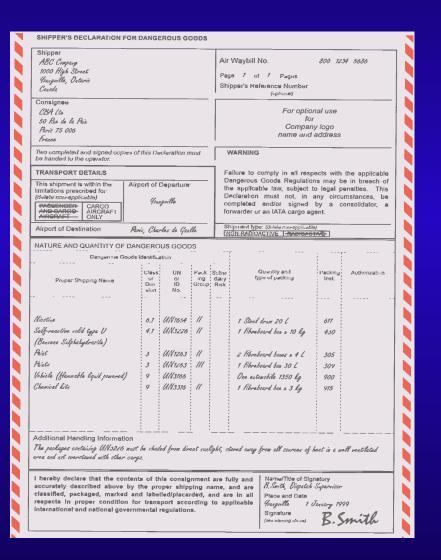




Hazardous Material Documentation

SDDG

Shipper's
Declaration
of
Dangerous
Goods



Motor Vehicle Inspection (Transporting Hazardous Materials)

 Motor Vehicle Inspection (Transporting Hazardous Materials) form

 Shipper must inspect vehicle at origin before loading. Receiver inspects vehicle at destination before unloading

 Used for Inspecting government and commercial vehicles (see instructions for commercial vehicle)

DD Form 626 (Cont)

 Read instructions before completing this form. Instructions are found on the reverse side of the form.



This form applies to all vehi	cles v	vhich	(Fi	ead I	TION (TRANS ristructions before parked 1. GOV	completing	this	form.)				LS) ION CONTROL	NUMB	ER
or placarded in accordance v SECTION 1 - DOCUMENTATIO		rue 4	9 CF	ĸ.		RIGIN DESTINATION								
					a.							b.		
2. CARRIER/GOVERNMENT OF	RGANI	ZATIC	N											
3. DATE/TIME OF INSPECTION	1													
4. LOCATION OF INSPECTION														
5. OPERATOR(S) NAME(S)														
6. OPERATOR(S) LICENSE NUI	MBER((S)												
7. MEDICAL EXAMINER'S CEI	RTIFIC	ATE*												
8. (X if satisfactory at origin)	_										9. CV	A DECAL DIS	LAYEL	0
a. MILITARY HAZMAT ENDORSEM	ENT		d ER	RG OR	EQUIVALENT COM	MERCIAL:	Y	ES	NO			MMERCIAL JIPMENT*	YES	N
b. VALID LEASE*			e. Di	RIVER'	S VEHICLE INSPECT	TION REPORT	*					K/TRACTOR		
c. ROUTE PLAN			f. CC	OPY OF	49 CFR PART 397						b. TRAII	LER		
SECTION II - MECHANICAL INS All items shall be checked of 10. TYPE OF VEHICLE(S)			uipmer	nt pric	r to loading. Iten	ns with an a				necke	d on all ii	ncoming loaded	l equipr	nen
12. PART INSPECTED	OR	IGIN 1)	DESTIN	NATION			OF	IGIN	DESTIN	IATION		COMMENT	s	
(X as applicable)		UNSAT	SAT	ÚNSAT				UNSAT	SAT	UNSAT		(3)		
a. SPARE ELECTRICAL FUSES	_	_			k. EXHAUST SYS									
b. HORN OPERATIVE					I. BRAKE SYSTEM	M*								
d. WINDSHIELD/WIPERS	\vdash	-	\vdash		m. SUSPENSION n. COUPLING DEV	/ICES			_					
e. MIRRORS					o. CARGO SPACE									
f. WARNING EQUIPMENT	1			p. LANDING GEAR*										
g. FIRE EXTINGUISHER*					q. TIRES, WHEELS	S, RIMS								
h. ELECTRICAL WIRING					r. TAILGATE/DOC	RS*								
i. LIGHTS AND REFLECTORS	-				s. TARPAULIN*									
j. FUEL SYSTEM* 13. INSPECTION RESULTS (X or	200)	ACCE	DTED		t. OTHER (Specify	REJ ECTED		-						
(If rejected give reason und				Jipme.			cies	u are cor	rected	l prior	to loadir	ng.)		
14. SATELLITE MOTOR SURVI				_			REJ B			Ė				
15. REMARKS														
16. INSPECTOR SIGNATURE (C		TION				17. INSP	ЕСТО	R SIGN	IATUR	RE (De	stination,)		
This section applies to Com	mercia	l and	Goven					ORI		DESTIN			NTC	_
be checked prior to release of I loaded equipment.	oaded	equip	ment a	and sh	all be checked or	all incomir	ng		1) UNSAT	SAT	UNSAT	COMME (3)		
18. LOADED IAW APPLICABLE	SEGR	EGAT	ION/C	OMP ²	TIBILITY TARI F	OF 49 CFR		SAI	UNSAT	SAT	UNSAI			
19. LOAD PROPERLY SECURED														_
20. SEALS APPLIED TO CLOSE	D VE	IICLE;	TARE	AULI	APPLIED ON OF	EN EQUIPM	ENT							
21. PROPER PLACARDS APPLI														
22. SHIPPING PAPERS/DD FOR			GOVE	RNM	NT VEHICLE SHI	PMENTS								
23. COPY OF DD FORM 626 FO								-						
24. SHIPPED UNDER DOT EXE 25. INSPECTOR SIGNATURE (C		N 868	5			26. DRIV	FR(S)	SIGNA	ATLIPE	(Orio	in)			
IS. IIISTECTOR SIGNATURE (C	gii ()					_0. DAIV	_14(3)	JIGIN		-, Orig	/			
27. INSPECTOR SIGNATURE (Destination)						28. DRIVER(S) SIGNATURE (Destination)								

Dangerous Goods Shipping Paper / Declaration and **Emergency Response** Information for Hazardous **Materials Transported by** Government Vehicles, **Containers or Vessels**

• Fill out a DD-Port 950 if & 18 porting HAZMAT on government vehicles or in any shipping container (including commercial 20' or 40' shipping containers) that is placed on a government vehicle for transportation

 Ensure other forms (HAZMAT guides from the current Emergency Response Guidebook [ERG]) are attached as appropriate

DD Form 836 (Cont)

- Must list all HAZMAT, providing quantities & weight
- Only a person who has completed the Hazardous Material Course can certify this document.

b. MODEL NO.:			c. CONTAINE				e. TCN NUMBER	₹:
			d. SERIAL NO.				f. BUMPER NO.	
	OODS SHIPPING PA IS MATERIALS TRA							
2. SHIPPER/ADDRESS/TELEPHONE NO.			TION AND DA ARED	TE SHIPME	NT	4. DAT	5. PAGE 1	
6. CARGO (To be complete	ed by the unit or shinner	Transporta	tion Office (T.(2))				L'
PROPER SHIPP		HAZARD	UN/ID	PACKING	PACK	AGES	NET TOTAL	TOTAL A
(Include RQ, Technical Name per 49 CFR172.20. a.	es, Additional Information 3, as required.)	CLASS/ DIVISION b.	NUMBER c.	GROUP d.	NUMBER e.	KIND f.	QUANTITY & GROSS WT. (kg) g.	
(Port personnel complete Its 7. FORT OF EMBARKATIO 9. CONSIGNEE			8a. SHIPNA	ME (OCONU	JS anly)		b. VOYAGE NU	MBER
11a. COPY OF EMERGENC	CY GUIDE NUMBER(S)							
b. EMERGENCY NOTIFIC as noted in Item 2	CATION. In all cases of	f accident,	breakdown				of this form.) must be given	to shipper
as noted in Item 2.						fication	must be given	
		ONE NUM SAF Y: N		800-524- PONSE CEN 1-424-880	0331 TIER 02	DOD ARMY: (USAF: (USN/MC		MATERIALS: 118 (COLLB 111 4692/ 3-0148
as noted in Item 2. c. 24-HOUR EMERGEN DOD NON-EXPLOSIVE HAZMAT: 1-800-851-8061 AT 5EA: 804-279-3131 (COLLECT) 12. CONTAINER PACKING	DOD HAZ CLASS (EXPLOSIVES) ONL 703-697-0218/02 (COLLECT) (WATCH ORFICER CERTIFICATE OR VEHIC that the goods describ	ONE NUM SAF Y: N 19 LE PACKIN Deed above	BERS: E HAVEN: 1- ATIONAL RES (NRC): 1-800 AT: 202-267-26 G DECLARATI have been p	800-524- PONSE CEN 1-424-880 SEA: 75 (COLLE ON acked/loac	0331 ITTER 02 CT)	DOD ARMY: (USAF: (USN/MC DLA: (7	RADIOACTIVE I (703) 697-02 (202) 767-40 : (757) 887- 1-888/528 (17) 770-528	MATERIALS: 18 (COLLE 11 4692/ 3-0148 33 entified abo
as noted in Item 2. c. 24-HOUR EMERGEN DOD NON-EXPLOSIVE HAZMAT: 1-800-851-8061 AT SEA: 804-279-3131 (COLLET) 12. CONTAINER PACKING It is hereby declared reaching/loading.)	DOD HAZ CLASS (EXPLOSIVES) ONL 703-697-0218/02 (COLLECT) (WATCH ORFICER CERTIFICATE OR VEHIC that the goods describ	HONE NUMI SAF Y: N 19 LE PACKIN bed above be complete	BERS: E HAVEN: 1- ATIONAL RES (NRC): 1-800 AT: 202-267-26 G DECLARATI have been p	800-524- PONSE CEN 1-424-880 SEA: 75 (COLLE ON acked/loac for all conta	0331 ITTER 02 CT)	DOD ARMY: (USAF: (USN/MC DLA: (7	RADIOACTIVE I (703) 697-02 (202) 767-40 : (757) 887- 1-888/528 (17) 770-528 siner/vehicle id by person respon	MATERIALS: 18 (COLLE 11 4692/ 3-0148 33 entified abo
as noted in Item 2. c. 24-HOUR EMERGEN DOD NON-EXPLOSIVE HAZMAT: 1-800-851-8061 AT SEA: 804-279-3.131 (COLLECT) 12. CONTAINER PACKING It is hereby declared accordance with applicat packing/loading.) CONTAINER NO. a. TYPE OR PRINT NAME This is to certify the in proper condition for train and national government	CY ASSISTANCE TELEM DOD HAZ CLASS (EXPLOSIVES) (ONL. 703-697-0218/02 (COLLECT) (WATCH OFFICER CENTIFICATE OR VEHC that the goods describle provisions. (Must. TION It the above named m ansportation accordinal regulations.)	tione num SAF N 19 CLE PACKIN CLE PACKIN b. SI aterials are	BERS: BE HAVEN: 1- ATIONAL RES (NRC): 1-800 AT 202-267-26 G DECLARATH have been ged and signed GNATURE E properly cla pplicable region	800-524- RONSE CEN-424-880 SEA: ON acked/loac for all conta VEHICLE	O331 ITER D2 CT) led into t iner/vehic NO. scribed, the Depo	DOD ARMY: (USAF: (USN/MC DLA: (7) the contale loads I	RADIOACTIVE IF (703) 697-02 (202) 767-40 : (757) 887 : 1-888/528 (17) 770-528 siner/vehicle id oy person respon c. DATE d, marked and of Transportat	MATERIALS: 18 (COLLB 11 4692/ 3-0148 33 entified about the forest
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- The emergency information for explosives is found on the reverse side of the form
- When carrying HAZMAT other than explosives, attach the appropriate guide from the current ERG

HAZMAT EMERGENCY RESPONSE INFO

EMERGENCY RESPONSE INFORMATION									
Guide Numbers 112 and 114 from the U.S. Department of Tran Book (RSPA P5800.7) are reproduced hereon. These guides as Mark an X in the appropriate box:									
USE GUIDE 112 FOR EXPLOSIVES: (1.1), (1.2), (1.3), (1.5) OR (1.6) Class A or B For all other hazardous materials or substances, annotate appro	USE GUIDE 114 FOR EXPLOSIVES (1.4) Class C								
in the block 11.a., and attach a copy of the guide number page									
GUIDE 112	GUIDE 114								
POTENTIAL HAZARDS FIRE OR EXPLOSION: MAY EXPLODE AND THROW FRAGMENTS 1600 METERS (1 MILE) OR MORE IF FIRE REACHES CARGO. HEALTH HAZARDS: Fire may produce imitating, comes ive and/or toxic gases.	POTENTIAL HAZARDS FIRE OR EXPLOSION: MAY EXPLODE AND THROW FRAGMENTS 500 meters (1/3 MILE) OR MORE IF FIRE REACES CARGO HEALTH HAZARDS: Fire may produce initating, corrosive and/or toxic gases								
PUBLIC SAFETY: CALL CHEMTREC AT 1-890-424-9300 Bolate spill or leak area immediately for at least 200 meters (1/3 mile) in all directions. Move people out of line of sight of the scene and away from windows Keep unauthorized personnel away and stay upwind Ventilate closed spaces before entering.	PUBLIC SAFETY: CALL Emergency Response Telephone Number on Shipping paper first, If Shipping Paper not available or no answer, CALL CHE MTRE C AT 1-800-424-9300: -Isolate leak or spill area immediately for at least 100 meters (300 feet) in all directions. More people out of line of sight of the scene and away from windows. -Keep unauthorized per cunel away and stryuppind. -Vertillate, closed spaces before entering.								
PROTE CIIVE CLOTHING: - Wear positive pressure self-contained breathing apparatus (SCBA) - tractural fine fighters ' protective clothing will only provide limited projection EVACUATION:	PROTECTIVE CLOTHING: - Wear positive pressure self-contained breathing apparatus (SCEA). Structural fixefighters' protective clothing will only provide limited protection: EVACUATION: LARCE SPILL Consider initial evacuation for 250 meters (800 feet) in all directions.								
Consider initial evaluation for 800 meters (1/2 mile) in all directions.	FIRE -If rail car or trailer is involved in a fine, ISOLATE for 500 meters (1/3 mile) in all disections also invitate evacuation including emergency responders for TO								

Shipping Documents Stowage Location

Wheeled Vehicles:
Seal all documents in a clear zip-lock plastic bag and place inside the vehicle on the passenger side's windscreen.

Tracked Vehicles: Seal all documents in a clear zip-lock plastic bag and tape to the outside front driver's side



Containers: Seal all documents in a clear zip-lock plastic bag and tape to the outside of the door.



Summary

• Forms:

- FORSCOM Form 285-R, Vehicle Load Card
- DD Form 1750, Packing List
- DA Form 5748-R, Shipment Unit Packing List and Load Diagram
- DD Form 1387 Military Shipment Label
- Destination Placard
- Radio Frequency Identification Tags
- Shippers Declaration of Dangerous Goods
- DD Form 626, Motor Vehicle Inspection (Transporting Hazardous Materials)
- DD Form 836, Dangerous Goods Shipping Paper / Declaration and Emergency Response Information

